

ABSTRACT

A method of continuously capturing BioOil and its constituents from a gas stream produced in a fast pyrolysis/thermolysis process, in a usable liquid form so as to produce a non-condensable gas free of fouling contaminants. The method

5 includes separating BioOil and its constituents from a gas stream using hot inertial separation to maintain the temperature of said BioOil and its constituents above a temperature at which the thick and/or sticky constituents cause inefficient operation of the equipment but low enough so that they do not undergo rapid degradation. Next the gas velocity is reduced to a temperature sufficiently

10 low to allow droplets in the gas stream to settle out but high enough so that a viscosity of said droplets remains low enough to avoid inefficient operation of the separation equipment. Finally, liquid is condensed out of the gas stream.